

CLAIMS

What is claimed is:

- 1 1. A device for retaining a golf club head, comprising:
2 a housing;
3 an insert removably coupled to said housing, said insert configured to at least partially
4 contact the golf club head; and
5 a locking mechanism coupled to said housing.
- 1 2. The device of claim 1, wherein said insert contains a cavity configured to at least
2 partially contact the golf club head therein.
- 1 3. The device of claim 2, wherein said cavity is at least partially contoured to the golf
2 club head.
- 1 4. The device of claim 3, wherein said cavity substantially envelopes the golf club head.
- 1 5. The device of claim 2, wherein:
2 said housing includes a lower housing part and an upper housing part; and
3 said insert includes a lower insert part coupled to said lower housing part and an upper
4 insert part coupled to said upper housing part.
- 1 6. The device of claim 5, wherein said lower insert part is removably coupled to said
2 lower housing part and said upper insert part is removably coupled to said upper housing part.

1 7. The device of claim 5, wherein:

2 said lower insert part contains a lower cavity part;

3 said upper insert part contains an upper cavity part; and

4 said lower cavity part and said upper cavity part are configured to matingly form said
5 cavity.

1 8. The device of claim 5, wherein at least one of said lower insert part and said upper
2 insert part defines a hole configured to allow a shaft coupled to the golf club head to pass
3 therethrough.

1 9. The device of claim 1, wherein said insert is formed at least in part of resin.

1 10. The device of claim 9, wherein said resin has a gel time of approximately one hour or
2 less.

1 11. The device of claim 9, wherein said resin, when cured, has a specific gravity of
2 approximately 1.7 to approximately 1.8.

1 12. The device of claim 9, wherein said resin, when cured, has a Shore D hardness of
2 approximately 80 to approximately 90.

1 13. The device of claim 9, wherein said resin, when cured, has an ultimate compressive
2 strength from approximately 8,000 psi to approximately 15,000 psi.

1 14. The device of claim 9, wherein said resin, when cured, has an ultimate flexural
2 strength from approximately 5,000 psi to approximately 11,000 psi.

1 15. The device of claim 9, wherein said resin, when cured, has a coefficient of thermal
2 expansion within the range of approximately $1.5 \cdot 10^{-5}$ in./in./°F to approximately $4.0 \cdot 10^{-5}$
3 in./in./°F.

1 16. The device of claim 9, wherein said resin is selected from the group consisting of RP
2 132 resin, RP 3262 resin, and RP 3269 resin.

1 17. The device of claim 1, wherein said insert is removably coupled to said housing.

1 18. The device of claim 1, wherein:
2 said housing includes a lower housing part and an upper housing part; and
3 said insert includes a lower insert part coupled to said lower housing part and an upper
4 insert part coupled to said upper housing part.

1 19. The device of claim 18, wherein said lower housing part is hingedly connected to said
2 upper housing part.

1 20. The device of claim 1, wherein said locking mechanism includes a cross bar and a
2 locking bar.

1 21. The device of claim 20, wherein said locking bar is selectively engageable with said
2 cross bar to retain the golf club head within said housing.

1 22. The device of claim 20, wherein:

2 said locking mechanism further includes a stator bar coupled to said housing at one
3 end and hingedly coupled to said cross bar at an opposite end; and
4 said locking bar is hingedly coupled to said housing.

1 23. The device of claim 22, wherein:

2 said housing includes a lower housing part and an upper housing part, said lower
3 housing part being hingedly connected to said upper housing part; and
4 said cross bar is moveable between an open position, in which said housing parts are
5 relatively moveable, and a closed position, in which said housing parts are relatively fixed.

1 24. The device of claim 23, wherein:

2 said locking bar includes a lock; and
3 said lock is selectively engageable to retain said cross bar in said closed position.

1 25. The device of claim 22, wherein:

2 said cross bar includes a notch; and
3 said locking bar is configured to fit, at least in part, within said notch.

1 26. The device of claim 25, further comprising a lock coupled to said locking bar.

1 27. The device of claim 26, wherein said lock is selectively engageable to retain or release
2 said cross bar.

1 28. The device of claim 27, wherein said lock is threadably engageable.

1 29. The device of claim 1, wherein the device is portable.

1 30. The device of claim 1, further comprising a base member for securing said housing
2 member.

1 31. The device of claim 30, wherein said base member is integral with said housing.

1 32. The device of claim 30, wherein said base member is configured to be at least partially
2 retained within a vise.

1 33. A device for customizing each of a group of distinct golf clubs, comprising:
2 a housing;
3 a plurality of inserts, each of said inserts being tailored to a specific golf club of the
4 group of distinct golf clubs; and
5 a locking mechanism.

1 34. The device of claim 33, wherein each of said inserts is at least partially contoured to its
2 specific golf club.

1 35. The device of claim 34, wherein each of said inserts substantially envelopes its
2 specific golf club.